

C L A I M S :

1. An oligoheteropolysaccharide composed by a heparin fraction having a mol wt comprised between 2,000 and 5,000 containing active groups, more particularly sulfuric groups, having the quantity and the positions which are characteristic of heparin.
2. Oligoheteropolysaccharide according to Claim 1, characterized in that it comes from the depolymerization of heparin with the reconstitution of the active groups, particularly the sulfuric groups, characteristic of heparin.
3. Oligoheteropolysaccharide according to Claim 1, characterized in that it is obtained from depolymerized heparins with reconstitution from the active groups of heparin.
4. A method for the preparation of the oligoheteropolysaccharide according to Claims 1, ~~2 or 3~~, characterized in that a starting material selected from among heparin oligomers with a mol wt comprised between 2,000 and 5,000 and heparin fractions having a low mol wt is treated with an equal amount by wt of a sulfotrioxide of a nitrogenous organic base in an alkaline environment and the reaction product is precipitated with a water-miscible solvent and purified.
5. A method according to Claim 4, characterized in that said sulfotrioxide is selected from among the sulfotrioxides of piridine and trimethylamine.
6. A method according to Claim 4, characterized in that said water-miscible solvent is methanol, ethanol, acetone, dioxan.
7. A method according to Claim 4, characterized in that

for the purification the precipitated product is taken up in an aqueous solution and passed through an ion-exchange resin or a molecular sieve.

8. Oligoheteropolysaccharide according to Claim 1, characterized in that it has the following physico chemical properties :

- Average mol wt (determined with the Somogy method in comparison with commercial heparin) from 2,600 to 5,500 daltons
- Hexosamines after hydrolysis (reaction with p-dimethyl-amino benzaldehyde) : $28\% \pm 2\%$
- Uronic acids after hydrolysis (reaction with carbazol) ; $31\% \pm 4\%$
- Organic SO_4^- after hydrolysis (titration with naphtharsone) : $30\% \pm 4\%$
- Molar ratios of uronic acids/hexosamines/ $-\text{SO}_4^-$ = $1/1/2$
- Specific rotatory power of the aqueous solution $[\alpha]_D^{20} = +40^\circ - +50^\circ$
- Electrophoresis of cellulose acetate (pyridine/acetic acid/water (1/10/229) pH 4.5 and development with toluidine blue) = a single band with anodic mobility $U = 2.1 \cdot 10^{-4} \text{ cm}^2 \text{ v}^{-1} \text{ sec}^{-1}$
- Powder of ivory color, amorphous and lightly hygroscopic
- Aqueous solution clear or slightly opalescent
- pH of the 5% aqueous solution : 7 - 8

9. Oligoheteropolysaccharide according to Claim 8, characterized by a metachromatic identification reaction in which 1 ml of 2% solution of the product added to 1 ml of a 0.0025% solution of toluidine blue acidifies with 0.1 ml of 1N hydrochloric acid causes a discharge of the color from blue to reddish blue.

10. A therapeutical composition, (more particularly) for the prevention of thrombotic ailments, characterized in that it contains as the active ingredient the oligoheteropolysaccharide as claimed in Claim 1 and following.

Sub
#17

C

Add B²

Add C₁